

Director's Column

QUERI's Research and Methodology (R&M) Committee convened recently to review the Strategic and Implementation plans developed by each of the eight QUERI Coordinating Centers. The Coordinating Centers are responsible for the implementation, program coordination, and ongoing management of the QUERI process. The R&M Committee – comprised of senior VA leaders with experience in research, clinical, operational, and policy issues – also helps set new goals that will advance QUERI's mission and VA's broader quality enhancement agenda.

A number of new activities are underway in response to R&M Committee recommendations and feedback. These activities include a series of work groups comprised of QUERI researchers, R&M committee members, and other VA representatives. Each work group targets a specific set of issues that include:

- **Data Issues Work Group:** This group focuses on QUERI's data and informatics needs, developing mechanisms to meet these needs via collaboration with other data resource and informatics programs.
- **Quality Enhancement Integration Work Group:** This group is enhancing QUERI's

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QUERI Stakeholders Reflect on Progress, Challenges and Future Plans

All eight condition-specific QUERI groups – chronic heart failure, colorectal cancer, diabetes, HIV/AIDS, ischemic heart disease, mental health, spinal cord injury, and substance use disorders – are working to implement clinical research findings and recommendations in order to improve clinical practices and outcomes throughout VA. In recent months, QUERI investigators, advisory committee members, and collaborators from QUERI's partner programs within VA have conducted in-depth discussions of QUERI's progress and accomplishments to date, in addition to the major barriers and challenges to further success in achieving QUERI's mission. Regarding QUERI's progress and accomplishments, the various stakeholder groups consistently expressed their belief that QUERI has made significant progress.

For example, the Mental Health QUERI (MHQ) is focusing its efforts to improve medication management for schizophrenia by increasing the appropriate use of antipsychotics. Implementing their intervention at 8 facilities, MHQ was successful in significantly reducing the number of patients on non-guideline recommended doses of antipsychotics. SCI QUERI is increasing the rates of pneumonia and influenza vaccine among individuals with spinal cord injury, who are more likely to die from these illnesses than the general

population. SCI QUERI implemented four interventions at multiple VHA facilities, incorporating these successful strategies in a new *Vaccine Initiative Handbook*. Since 1999, the QUERI Substance Use Disorders group has increased veterans' access to opioid agonist therapy – the most effective treatment for opioid dependence – by 10%, and expects to double this over the next year. Chronic Heart Failure QUERI created an innovative CHF Coordinated Care Program to reduce the high rate of readmissions for veterans with chronic heart failure. Ischemic Heart Disease (IHD) QUERI is working to reduce secondary cardiac events for veterans with IHD through lipid management. Various interventions in VISN 20 produced a 10% decrease in mean LDL over two years, resulting in a 17% reduction in coronary events.

At the same time, QUERI's progress and experiences have helped VA and QUERI leaders and stakeholders to better identify and understand the numerous barriers and

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Does HIV Therapy Increase the Risk of Vascular Disease?

The widespread use of potent combination antiretroviral therapy greatly improves survival in persons infected with the Human Immunodeficiency Virus (HIV). However, it has been reported that premature cardiovascular and cerebrovascular disease might be linked to the use of these therapies. These reports have prompted concern about the long-term use of highly active antiretroviral therapy. Funded by the Quality Enhancement Research Initiative (QUERI), and an Oversight Committee convened by the European Agency for the Evaluation of Medicinal Products, this study sought to determine whether patients with HIV may be at increased risk for cardiovascular and cerebrovascular disease due to HIV infection itself – and to the effects of antiretroviral drugs that help to prolong their lives.

Investigators from HIV-QUERI constructed a large retrospective cohort of VA patients (more than 36,000) who received care for HIV between 1993 and 2001 to evaluate the relationship between HIV treatment and cardiovascular and cerebrovascular diseases. Sources of data used to develop the cohort were the Quality Enhancement Database for HIV, developed by HIV-QUERI, and the Immunology Case Registry of the VA AIDS Service. All data sources were anonymous and contained no patient identifiers.

Investigators analyzed the database records to measure outcomes regarding:

- Admission for cardiovascular disease,
- Admission for cardiovascular or cerebrovascular disease,

- Admission or death from cardiovascular or cerebrovascular disease, and
- Death from any cause.

In order to convert ICD-9 codes into these variables, investigators reviewed the literature and convened a panel of senior coder-abstractors and researchers in infectious disease, neurology, and cardiology. ICD-9 codes for the following cardiovascular events were converted: acute myocardial infarction, ischemic heart disease, angina pectoris, and other forms of chronic heart disease, while cerebrovascular events included intracerebral hemorrhage, cerebral atherosclerosis, and other cerebrovascular diseases. Regression models used in the study were a standard group of covariates: race/ethnicity, sex, age, severity of illness, AIDS diagnosis, and history of vascular disease, diabetes, hypertension, hyperlipidemia, and smoking. They also recorded the first year of HIV care within the VA healthcare system.

Findings show that VA patients with HIV are more likely to be black (52.4%), male, and slightly older, and that 23.9% had been treated at a VA facility for diabetes, hypertension, hyperlipidemia, or smoking. Results also show that nearly 26,000 patients took antiretroviral drugs for an average of 15 months each. Large increases in the use of antiretroviral therapy by HIV-infected VA patients in the second half of the 1990s were accompanied by small *decreases* in

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integration with other VA organizations and programs that seek to improve clinical policies and practices (e.g., Office of Quality and Performance, National Clinical Practice Guidelines Council, Office of Patient Care Services).

- **External Visibility Work Group:** This group is working to increase QUERI's visibility outside of VA, in order to strengthen collaborations between QUERI and non-VA organizations and efforts that share its mission.
- **National Meeting Program Committee:** This group is planning a national conference designed to evaluate QUERI progress, discuss the future research agenda, and facilitate interactions among QUERI participants and others conducting research-based quality enhancement efforts.

I am happy to report that QUERI continues to work to enhance quality and outcomes of care within VA, and to develop new knowledge and insights regarding quality enhancement processes and methods.

John G. Demakis, MD
HSR&D Director

* For more information about these work groups, please contact Becky Kellen at (Becky.Kellen@med.va.gov; 202-254-0216), or Kathi Beutler at (Kathleen.Beutler@med.va.gov; 202-254-0217).

QUERI Groups Focus on Lipid Management

People with diabetes are at a high risk for cardiovascular disease, a leading cause of morbidity and mortality for those with type 2 diabetes. Clinical trials targeting cardiovascular prevention have shown the efficacy of decreasing low-density lipoprotein cholesterol (LDL-C) for both primary and secondary prevention in people with and without diabetes. Further, a large percentage of patients with coronary heart disease (CHD) do not have a current LDL (or lipid) measurement, and reasons for this are unknown.

Two QUERI groups – Diabetes Mellitus QUERI (QUERI-DM) and Ischemic Heart Disease QUERI (IHD QUERI) – have conducted studies on the effects of lipid management.

IHD QUERI studies patients who do not undergo lipid testing

IHD QUERI investigators sought to identify patients at risk for not undergoing lipid measurement and to determine whether they had higher risk-adjusted morbidity and mortality compared to patients with a lipid measurement. Using an existing database, they extracted data on all active primary care and cardiology patients with CHD from 8 VA hospitals (n = 12,135). Investigators then assessed information on patient demographics, outpatient and inpatient diagnoses, pharmacy data, and laboratory data. Although guidelines recommend measuring patients' LDL cholesterol on a yearly basis, any lipid level measured within the 15-month baseline study period was considered a "current" measurement to reflect the practicalities of clinical care.

Results of this study show that CHD patients without a baseline LDL measurement had a 5% higher rate of

hospitalization, and a 35% worse survival rate. During the 15-month baseline period, 40% of the patients did not have an LDL measurement. Those less likely to have a lipid measurement included: older patients, African Americans, those with a history of chronic obstructive pulmonary disease or depression, and those living more than 25 miles from a medical center.

QUERI-DM examines disparities in lipid management for patients with diabetes

A target LDL-C of no more than 130 mg/dl has been widely recommended. However, people with diabetes are often above recommended targets despite the availability of well-tolerated lipid-lowering medications. This QUERI-DM study sought to determine whether some patients were getting less aggressive LDL-C management than others, especially among patients with diabetes who had no recent cardiac events. Using administrative data, investigators studied veterans with diabetes who received care at VA facilities nationwide, with an LDL-C value available in FY 1998 (n = 97,690) and FY 1999 (n = 198,991).

Results of this study show that diabetic patients without recently coded heart disease were one-third as likely to be on lipid-lowering medications than those with recently coded heart disease. Investigators also report that for those using lipid-lowering medications, one-quarter to one-third were above the target LDL-C, and more than 95% used a statin medication.

These findings indicate the importance of continued vigilance regarding lipid management to decrease cardiovascular risks in two large patient populations. These QUERI studies also suggest the need for interventions that will improve the care of veterans with CHD and/or diabetes. More information about QUERI-DM and IHD QUERI, as well as links to other QUERI sites is available on the QUERI website at <http://www.hsrd.research.va.gov/research/queri/>.

Ho M, Maynard S, Starks H, Sun H, Sloan K, Sales A. Outcomes in patients with coronary heart disease who do not undergo lipid testing. *The American Journal of Cardiology* 2003; 91(8): 986-8.

Safford M, Eaton L, Hawley G, Brimacombe M, Rajan M, Li H, Pogach L. Disparities in use of lipid-lowering medications among people with type 2 diabetes mellitus. *Archives of Internal Medicine* 2003;163:922-928.

QUERI Quarterly is a quarterly publication of the Office of Research and Development's Health Services Research and Development Service. This newsletter discusses important issues and findings regarding the Quality Enhancement Research Initiative. QUERI focuses on eight conditions due to their high volume and/or high risk among VA patients: chronic heart failure, colorectal cancer, diabetes, HIV/AIDS, ischemic heart disease, mental health, spinal cord injury, and substance use disorders. *QUERI Quarterly* is available on the web at http://www.hsrd.research.va.gov/publications/queri_quarterly/

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challenges to further improvement in VA clinical practices and outcomes. Among the important insights learned through the QUERI process is the recognition that QUERI's mission is shared by many others within VA, and that success in achieving shared goals requires intensive collaboration and coordination of quality-related activities.

Thus QUERI continues to strengthen its ties and coordination with VA's National Leadership Board, Network Directors, Clinical Managers and Quality Managers, and with other groups representing network and facility leadership and quality-related activities. Within Central Office, QUERI is strengthening its ties to the Office of Quality and Performance (OQP) and related programs and committees, including VA's National Clinical Practice Guidelines Council and Performance Measures Workgroup. Coordination with the Office of Patient Care Services (PCS) is also an important focus, with increased efforts to work with the PCS Strategic Health Group consultants responsible for diseases/conditions targeted by QUERI, as well as consultants in other areas whose target clinical audiences (e.g., VA primary care physicians) are common to QUERI. A major goal of these efforts is the development of more consistent strategies and tools that assist VA clinicians in implementing evidence-based practices that will enhance quality of care. QUERI is also working to strengthen leadership support, and is reaching out to network and facility leadership to better understand their needs and preferences for QUERI involvement and support.

Concurrent with the efforts described above, QUERI is convening several work groups comprised of QUERI researchers, advisors and other stakeholders. Separate work groups will examine issues and develop specific recommendations and plans related to: better coordination and integration of QUERI with other VA programs and activities sharing common missions, improving QUERI's visibility and ties to external groups engaged in similar missions in other healthcare systems, planning a national conference to focus on quality enhancement research, as well as other issues.

Everyone involved with QUERI has already made remarkable progress in their efforts to implement research advances into better quality of care and patient outcomes. Continued successes, as well as past achievements, are due to the commitment of its leadership, invaluable collaborations with others dedicated to quality improvement, and the perseverance and talent of VA researchers.

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*For more information about the QUERI program, visit the national QUERI website at www.hsrd.research.va.gov/research/queri/.

QUERI

Submission Deadline

QUERI Quarterly is glad to accept submissions for publication consideration. Please submit articles, updates or other information of interest to our readers by **Friday, August 1, 2003** for publication in our September 2003 issue. Submit to Diane Hanks at diane.hanks@med.va.gov.

HIV THERAPY

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cardiovascular and cerebrovascular events, and large *decreases* in death rates. Moreover, for individual patients, increasing exposure to potent antiretroviral therapy was not accompanied by an increasing risk for hospital admission or death from cardiovascular or cerebrovascular events, but was associated with decreasing risk of death from any cause. Contrary to previous reports, these findings suggest that fear of accelerated vascular disease should not deter patients and providers from employing the highest quality process of HIV care, as defined by the use of guideline-recommended combination antiretroviral therapy.

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Bozzette SA, Ake CF, Tam HK, Chang SW, Louis TA. Cardiovascular and cerebrovascular events in patients treated for human immunodeficiency virus infection. *New England Journal of Medicine* February 20, 2003;348(8):702-10.

For further information about QUERI-HIV, you may contact Candice Bowman, PhD by e-mail at cbowman@med.va.gov.